

# Mars Exploration Science Monthly Newsletter

A publication of the Mars Program Office and the Mars Exploration Program Analysis Group (MEPAG)

June 2016

## Mars Science News

### **Mars Polar Science Conference—Registration is open**

September 5-9, 2016 @ Reykjavik, ICELAND

The Mars Polar 2016 conference, field trip, and lodging registration is now open: <http://www.hou.usra.edu/meetings/marspolar2016/>. For additional information about Iceland and the conference, visit <http://en.vedur.is/conferences/marspolar2016/>.

### **Mars Program Student Travel Grant for Mars Polar Science Conference**

Abstract and Application due: June 23

Conference: September 5-9 @ Reykjavik, ICELAND

NASA's Mars Program Office has announced that travel funding awards are available for up to five (5) U.S. students. Students who are U.S. citizens or legal residents are eligible for this program. The student travel grants are competitive and will reimburse travel and registration expenses. Applications are due June 23, 2016 (same day as abstracts), and must include the student's first-authored abstract and an application form. NASA Headquarters will make the selections and students will be notified in July. The application instructions and form can be found at <http://mepag.nasa.gov/student.cfm?expand=student>.

Questions about this program should be directed to Dr. Serina Diniega ([serina.diniega@jpl.nasa.gov](mailto:serina.diniega@jpl.nasa.gov)).

### **USGS Planetary Photogrammetry - Free Training Opportunities**

SOCET SET® and ISIS, applies to HiRISE image pairs: July 25-27

ISIS: July 28-29

The Planetary Photogrammetry Guest Facility at the Astrogeology Science Center of the U.S. Geological Survey would like to announce its Call for Participation for a training opportunity on July 25-27, 2016. This training will cover photogrammetric processing of planetary stereo imagery using USGS Integrated Software for Imagers and Spectrometers and SOCET SET® software developed by BAE Systems. The training is FREE to participants, and will cover end-to-end, hands-on photogrammetric procedures for surface extraction (i.e., digital elevation model generation) from Mars Reconnaissance Orbiter HiRISE image pairs. For additional information and application instructions, please see <http://astrogeology.usgs.gov/facilities/photogrammetry-guest-facility>. For information about a USGS Integrated Software for Imagers and Spectrometers Hands-on Workshop being held July 28-29, 2016 - also hosted by the Astrogeology Science Center, please see: <https://isis.astrogeology.usgs.gov/fixit/projects/isis/news>. Interested individuals can attend both the SOCET SET® and the USGS Integrated Software for Imagers and Spectrometers workshops.

### **Feedback requested by Mars Program Office about Communications**

As announced at [MEPAG Meeting 31](#), the Mars Program Office is soliciting feedback about our communications with the Mars community. Please help us assess and optimize the design and content of this newsletter, the MEPAG webpage, and the annual MEPAG meetings: <https://docs.google.com/forms/d/15DKE9kzEXfdMZbcn2IJGak8fDxrpYZf7cbfsKbVUBKI/viewform>.

## 2016 NASA Planetary Volcanology Workshop: Analogs to Volcanic Features and Processes in Satellite and Rover Images

July 12-19, Kīlauea Volcano, Hawai'i

This field workshop is sponsored by NASA, and will focus on volcanic features analogous to those on Mars that have been imaged recently by MOC, THEMIS, HRSC, HiRISE, and the MER and MSL rovers, comparing their field appearance to their appearance in remotely-sensed images. The workshop will be almost exclusively field-based, with excursions to locations on Kīlauea and Mauna Loa that are particularly instructive with regard to their value as Mars analogs. This opportunity is intended for NASA-funded senior graduate students who have a background in volcanology and are working on Mars volcanology problems, but need volcanology field experience. All expenses will be covered - on a reimbursement basis. US citizenship is not required, but all applicants must be students/employees at a US University/Institution, and their current study or work must be funded by a NASA planetary research program. Full application instructions and eligibility information are listed at [http://www.lpi.usra.edu/planetary\\_news/2016/04/04/announcing-the-2016-nasa-planetary-volcanology-workshop/](http://www.lpi.usra.edu/planetary_news/2016/04/04/announcing-the-2016-nasa-planetary-volcanology-workshop/); Application materials and questions should be sent to Sarah Fagents: [fagents@higp.hawaii.edu](mailto:fagents@higp.hawaii.edu).

## SPICE Training Announcement

September 12-15 in Madrid, SPAIN

The ESAC SPICE Service and the Navigation and Ancillary Information Facility (NAIF) will conduct a SPICE observation geometry training class on September 12-15, 2016 in Madrid, SPAIN. SPICE at ESAC is described at: <http://www.cosmos.esa.int/web/spice/home>. The class is free and open to all professionals and students involved in Solar System exploration. Further information about the class and the class registration form are found at: <http://www.cosmos.esa.int/web/spice/training-class-september-2016>. Registration is due by June 30, 2016.

## Call for maps: Mars Exploration Zone Map Design Competition

The 2030s is the target decade for the first human visit to Mars as planned by NASA. In 2015, [47 candidate landing sites](#) or [Exploration Zones \(EZ\)](#), each 200 km in diameter, have been proposed by the planetary science community. These should be mapped in high detail in the forthcoming years to enable proper comparison of the 47 sites. To enter this competition, select one candidate landing site and design an actual map that You envision would be useful in surface operations. This contest is open to students, young professional cartographers, and graphic artists in any country of the world. The contest is part of the [International Map Year](#) activities. For more information: <https://planetcarto.wordpress.com/2016/04/22/mars-exploration-zone-map-competition/>.

## Near-term Due Dates (next three months)

Due	Project
June 3	<b>2016 Planetary Geologic Mappers' Meeting</b> . Registration deadline
June 22	<b>Joint DPS-EPSC Meeting</b> , Abstract deadline (UPDATED)
June 23	<b>6th International Conference on Mars Polar Science and Exploration</b> , Abstract deadline
June 30	<b>Annual Meetings of the Meteoritical Society</b> , Registration deadline
July 1	<b>IEEE Aerospace Conference</b> , Abstract due date
July 12	<b>GSA Meeting</b> , Abstract deadline.
August 9	<b>3rd International Workshop on Instrumentation for Planetary Missions</b> , Abstract deadline
August 10	<b>The Seventh Moscow Solar System Symposium (7M-S3)</b> , Abstract deadline
August 22	<b>GSA Meeting</b> , Early registration deadline

## Upcoming Conferences and Workshops

### A note about “conferences” and this calendar of events

- Missing NCTS#s (and forecasting deadline, if anomalous) can be sent to Meredith Cosby ([Meredith.A.Cosby@jpl.nasa.gov](mailto:Meredith.A.Cosby@jpl.nasa.gov)).
- If no deadline is noted: it is usually 90days in advance — sometimes further in advance if the conference is “Heavily Attended.”
- Please do not assume our noting of NCTS# is complete. If you are unsure if an event is a conference or not, or when the forecasting deadline may be, please consult with your NASA Center conference forecasting/travel unit.

### Second Quarter, 2016

	June 5-8, 2016 Atlanta, GA, USA	<b>53rd Annual Meeting of the Clay Minerals Society</b> <a href="http://conferences.illinois.edu/CMS2016/index.html">http://conferences.illinois.edu/CMS2016/index.html</a> Session: <i>Clay Minerals on Mars and Other Planetary Bodies</i>
	June 7-9, 2016 Golden, CO, USA	<b>7th Joint Meeting of Space Resources Roundtable and Planetary &amp; Terrestrial Mining Sciences Symposium</b> <a href="http://www.isruinfo.com/">http://www.isruinfo.com/</a>
	June 13-15, 2016 Flagstaff, AZ, USA	<b>2016 Planetary Geologic Mappers' Meeting</b> <a href="http://www.hou.usra.edu/meetings/pgm2016/">http://www.hou.usra.edu/meetings/pgm2016/</a>
	June 13-17, 2016 Laurel, MD, USA	<b>International Planetary Probe Workshop (IPPW-13)</b> <a href="http://ippw2016.jhuapl.edu/index.php">http://ippw2016.jhuapl.edu/index.php</a> , NCTS #24380-16 <i>additional short course offered June 11-12, 2016</i>
	June 20-21, 2016 London, UK	<b>Martian Gullies and their Earth Analogues</b> <a href="https://www.geolsoc.org.uk/martiangullies">https://www.geolsoc.org.uk/martiangullies</a> , NCTS #24907-16
	June 20-21, 2016 IFSI, Frascati, ITALY	<b>Mars Express Science Working Team Meeting</b> Contact Dmitri Titov, <a href="mailto:Dmitri.titov@esa.int">Dmitri.titov@esa.int</a>
	June 20-24, 2016 Potsdam, GERMANY	<b>11th International Conference on Permafrost (ICOP) 2016</b> <a href="http://icop2016.org/index.php/program">http://icop2016.org/index.php/program</a> Session #16 "Planetary Permafrost and Earth Analogues"
	June 23, 2016 Pasadena, CA, USA	<b>Mars Odyssey PSG</b> Contact Jeff Plaut, <a href="mailto:Jeffrey.j.plaut@jpl.nasa.gov">Jeffrey.j.plaut@jpl.nasa.gov</a>
	June 28-30, 2016 Laurel, MD, USA	<b>14th Meeting of the NASA Small Bodies Assessment Group (SBAG)</b> <a href="http://www.lpi.usra.edu/sbag/">http://www.lpi.usra.edu/sbag/</a>
	June 26-July 1, 2016 Yokohama, JAPAN	<b>26th Goldschmidt Conference</b> <a href="http://goldschmidt.info/2016/index">http://goldschmidt.info/2016/index</a> Session 02h: <i>Geochemical Evolution of the Martian Surface and Interior</i>

### Third Quarter, 2016

	July 18-19, 2016 Moffett Field, CA, USA	<b>Third International Conference on the Exploration of Phobos and Deimos</b> <a href="http://phobos-deimos.arc.nasa.gov/">http://phobos-deimos.arc.nasa.gov/</a> , NCTS #24799-16
<b>New!</b>	July 19, 2016 Moffett Field, CA, USA	<b>7th Annual Lunar and Small Bodies Graduate Conference</b> <a href="http://impact.colorado.edu/lungradcon/2016/">http://impact.colorado.edu/lungradcon/2016/</a>
	July 25-29, 2016 Pasadena, CA, USA	<b>NASA's 28th Annual Planetary Science Summer School</b> <a href="https://pscischool.jpl.nasa.gov/index.cfm">https://pscischool.jpl.nasa.gov/index.cfm</a>
	July 27-29, 2016 Seattle, WA, USA	<b>Exoplanet Biosignatures Workshop Without Walls and ExoPAG SAG 16 Activity</b> <a href="http://nai.nasa.gov/calendar/workshop-without-walls-exoplanet-biosignatures/">http://nai.nasa.gov/calendar/workshop-without-walls-exoplanet-biosignatures/</a> , NCTS#25456-16

## Third Quarter, 2016—continued

	July 30-August 7, 2016 Istanbul, TURKEY	<b>41st Scientific Assembly of the Committee on Space Research (COSPAR 2016) and Associated Events</b> <a href="http://www.cospar-assembly.org">http://www.cospar-assembly.org</a>
	August 7-12, 2016 Berlin, GERMANY	<b>Annual Meetings of the Meteoritical Society</b> <a href="http://www.metsoc-berlin.de/">http://www.metsoc-berlin.de/</a> , NCTS# 24222-16
	August 17-19, 2016 Providence, RI, USA	<b>7th Planetary Crater Consortium Meeting</b> <a href="http://www.planetarycraterconsortium.nau.edu/">http://www.planetarycraterconsortium.nau.edu/</a>
	September 5-9, 2016 Reykjavik, ICELAND	<b>6th International Conference on Mars Polar Science and Exploration</b> <a href="http://www.hou.usra.edu/meetings/marspolar2016/">http://www.hou.usra.edu/meetings/marspolar2016/</a> , NCTS# 23841-16
	September 14-15, 2016 Irvine, CA, USA	<b>NRC's Committee on Astrobiology and Planetary Science (CAPS)</b>
	September 25-28, 2016 Denver, CO, USA	<b>GSA Meeting</b> <a href="http://community.geosociety.org/gsa2016/home">http://community.geosociety.org/gsa2016/home</a> , NCTS # 24946-16 <i>Session T168: Past and present biosignature recognition on Earth, Mars, and Beyond</i>
	September 26-30, 2016 Guadalajara, MEXICO	<b>67th International Astronautical Congress</b> <a href="http://www.iafastro.org/events/iaa/iaa2016/">http://www.iafastro.org/events/iaa/iaa2016/</a> , NCTS# 24741-16

## Fourth Quarter, 2016

<b>New!</b>	October 0-14, 2016 Moscow, RUSSIA	<b>The Seventh Moscow Solar System Symposium (7M-S3)</b> <a href="http://ms2016.cosmos.ru/">http://ms2016.cosmos.ru/</a>
	October 16-21, 2016 Pasadena, CA, USA	<b>Joint DPS-EPSC Meeting</b> <a href="http://aas.org/meetings/dps48">http://aas.org/meetings/dps48</a> , NCTS #25341-17
	October 19, 2016	<b>2016 ExoMars (TGO and EDM) Arrival at Mars</b>
<b>New!</b>	October 24-27, 2016 Pasadena, CA, USA	<b>3rd International Workshop on Instrumentation for Planetary Missions</b> <a href="http://www.hou.usra.edu/meetings/ipm2016/">http://www.hou.usra.edu/meetings/ipm2016/</a>
<b>New!</b>	November 29-December 1, 2016 Washington DC, USA	<b>VEXAG Meeting #14</b> <a href="http://www.lpi.usra.edu/planetary_news/2016/05/20/save-the-date-vexag-meeting-14-tuesday-thursday-november-29-december-1-2016-nasa-headquarters-washington-dc/">http://www.lpi.usra.edu/planetary_news/2016/05/20/save-the-date-vexag-meeting-14-tuesday-thursday-november-29-december-1-2016-nasa-headquarters-washington-dc/</a> <i>Student travel grants available: <a href="http://www.lpi.usra.edu/planetary_news/2016/05/27/student-and-early-career-travel-grants-for-vexag-meeting-14-in-washington-dc/">http://www.lpi.usra.edu/planetary_news/2016/05/27/student-and-early-career-travel-grants-for-vexag-meeting-14-in-washington-dc/</a></i>
	December 12-16, 2016 San Francisco, CA, USA	<b>AGU Fall Meeting</b> <a href="http://fallmeeting.agu.org/2016/">http://fallmeeting.agu.org/2016/</a> , NCTS #25415-17

## 2017

<b>New!</b>	March 4-11, 2017 Big Sky, MT, USA	<b>IEEE Aerospace Conference</b> <a href="https://www.aeroconf.org/">https://www.aeroconf.org/</a>
	March 28-30, 2017 Washington, DC, USA	<b>NRC's Committee on Astrobiology and Planetary Science (CAPS)</b>
	September 13-14, 2017 Washington, DC, USA	<b>NRC's Committee on Astrobiology and Planetary Science (CAPS)</b>

## Seasons on Mars

	MY33	MY34	MY35
Start of Northern Spring / L <sub>s</sub> 0	6/18/2015	5/05/2017	3/23/2019
Start of Northern Summer / L <sub>s</sub> 90	1/03/2016	11/20/2017	10/08/2019
Start of Northern Autumn / L <sub>s</sub> 180	7/04/2016	5/22/2018	4/08/2020
Start of Northern Winter / L <sub>s</sub> 270	11/28/2016	10/16/2018	9/02/2020

## Special holidays to consider when scheduling conferences/workshops/meetings

Good Friday	3/25/2016	4/14/2017	3/30/2018	4/19/2019
Rosh Hashanah	10/03/2016	9/21/2017	9/10/2018	9/30/2019
Yom Kippur	10/12/2016	9/30/2017	9/19/2018	10/09/2019
(Note that Jewish holidays start at sundown the previous evening)				
Thanksgiving Day, Canada	10/10/2016	10/09/2017	10/08/2018	10/14/2019
Thanksgiving Day, U.S.	11/24/2016	11/23/2017	11/22/2018	11/28/2019
Christmas Day	12/25/2016	12/25/2017	12/25/2018	12/25/2019

## Editors

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Please send your Mars Community Announcements and calendar items for inclusion in next month's newsletter to:

Meredith Cosby at [Meredith.A.Cosby@jpl.nasa.gov](mailto:Meredith.A.Cosby@jpl.nasa.gov).

This newsletter (and all previous months') is also posted on the MEPAG website: <http://mepag.jpl.nasa.gov>

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